

Notice of Allowability

Application No.

10/000,422

Applicant(s)

SCHKOLNIK, DANIEL G.

Examiner

DUC Q. DINH

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1:313 and MPEP 1308.

1. ☒ This communication is responsive to phone interview on 05/09/07.
2. ☒ The allowed claim(s) is/are 5-21 and 23 renumbered 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>10/31/01</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |



EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Derek Meeker on May 09, 2005.

The application has been amended as follows:

5. (Currently amended) An improved optical wheel comprising a circular disc having a plurality of windows arranged adjacent a periphery of the disc, the improvement comprising each of the plurality of windows being characterized by a substantially hourglass shape such that a variation in width of each window ~~corresponds to~~ is more closely correlated to a light intensity distribution of an associated light source resulting in a more accurate output signal.

9. (Currently amended) ~~[[he]]~~ The optical wheel of claim 5, wherein each of the plurality of windows is elongated to define a long axis, said long axis being substantially congruent with a radius of the disc.

10. (Currently amended) An optical device, comprising:

Art Unit: 2629

a light source having a non-uniform intensity versus angular deviation from an axis;
a detector;
a light path defined between the light source and the detector;
a stroboscopic element; and
a plurality of substantially hourglass-shaped windows arranged on the stroboscopic element and operative to be interposed in the light path;
wherein each hourglass-shaped window is shaped such that a variation in width of the window ~~corresponds to~~ is more closely correlated to a light intensity distribution of the light source resulting in a more accurate output signal.

15. (Currently amended) An optical wheel, comprising:
a circular disc having a periphery;
a plurality of windows arranged adjacent the periphery of the disc, each of the plurality of windows comprising:
a top and a base defining a height; and
a first side and a second side defining a width;
wherein each of the plurality of windows is characterized by a substantially hourglass shape such that a variation in width of the window is more closely correlated to a light intensity distribution of the light source resulting in a more accurate output signal.

20. (Currently amended) An optical device, comprising:
a light source configured to emit light;

Art Unit: 2629

a light path defined by an axis intersecting the light source along which an intensity of the light is substantially a maximum;

a detector disposed in the light path; and

an optical element between the light source and the detector, the optical element including:

a plurality of optical windows, each optical window having:

a first side;

a second side disposed opposite the first side, the first and second sides shaped such that points on the first side and points on the second side are disposed at varying distances;

a minimum distance line defined by a point on the first side and a point on the second side having a substantially minimum distance between each other; and

a third side coupling an end of the first side to an end of the second side;

wherein, when the light path intersects one of the optical windows, the minimum distance line of the optical window substantially intersects the light path resulting in a more accurate output signal.

24. (Cancelled)

Allowable Subject Matter

2. Claims 5-21 and 23 are allowed and renumbered as 1-18

3. The following is an examiner's statement of reasons for allowance:

Art Unit: 2629

None of the cited art teaches or suggests: an optical wheel comprising a circular disc having a plurality of windows arranged in a periphery of the disc;

wherein each hourglass-shaped window is shaped such that a variation in width of the window is more closely correlated to a light intensity distribution of the light source resulting in a more accurate output signal. (claims 5, 10 and 15)

OR

an optical element between the light source and the detector, the optical element including:

a plurality of optical windows, each optical window having:

a first side;

a second side disposed opposite the first side, the first and second sides shaped such that points on the first side and points on the second side are disposed at varying distances;

a minimum distance line defined by a point on the first side and a point on the second side having a substantially minimum distance between each other; and

a third side coupling an end of the first side to an end of the second side;

wherein, when the light path intersects one of the optical windows, the minimum distance line of the optical window substantially intersects the light path resulting in a more accurate output signal. (claim 20)

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2629

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE can be reached on (571)272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner
Art Unit 2629

